REMARKS

Claims 4-8 are pending in this application, with claims 5, 6 and 8 withdrawn from consideration. No amendment is made in this Response. It is believed that this Response is fully responsive to the Office Action dated **April 22, 2011**.

Claims 4 and 7 are rejected under 35 U.S.C. §103(a) as being unpatentable over Miller et al. (US 5,289,975) in view of Yamada (US 2003/0051851) and JP 2001-293551 all previously cited, and also in view of Anderson et al. (US 5,423,520). (Office action paragraph no. 2)

The rejection of claims 4 and 7 is respectfully traversed, and reconsideration is requested.

In traversing the rejection, Applicant maintains the arguments made in the Response dated March 9, 2011. In particular, Applicant argued that the Examiner was incorrect in stating that JP '551 discloses a curved surface shaped inner wall of the nozzle and that this forms a focal point at the discharge port or in the vicinity of the discharge port. Applicant also argued that the disclosure of JP '551 cannot be combined with the disclosure of Miller '975, or with Anderson '520.

In paragraphs no. 3 and 4 of the Office action, the Examiner provides a "Response to Amendment [sic]." In particular, the Examiner again states that Miller discloses the features of the claimed invention as disclosed above except for the pressing body and the limitation that "said discharge nozzle includes a curved surface shaped inner wall and said molten metal jetted from said discharge port is spherical metal droplets."

The Examiner then reviews Yamada at Figure 7, stating again that this discloses a pressing body 20A. Anderson is again cited as disclosing a molten metal jetted from the discharge port as spherical metal droplets. The Examiner repeats the statement from paragraph no. 2 that it would have been obvious to combine the references.

On page 4 of the Office action, the Examiner further comments that Yamada is cited only for the limitation of a pressing body, and that JP '551 is cited only for the missing limitation of the discharge nozzle that includes a curved surface shaped inner wall. The Examiner broadly states that "Miller, Yamada, JP 2001-293551, and Anderson are in the same technical field of nozzle with melting molten alloy material ...." as a justification for combining the references.

Applicant respectfully submits that the Examiner has not fully responded to some of the arguments made in the Response of December 10, 2010. In particular, Applicant argued that JP '551 does **not** disclose a discharge nozzle meeting the limitations of claim 4, which recites: "wherein said discharge nozzle includes a curved surface shaped inner wall which forms a focal point at said discharge port or in the vicinity of said discharge port."

In the Response to Amendment, the Examiner states (page 3, lines 14-15) that JP '551 discloses a nozzle with a curved shaped inner wall. However, the Examiner does not state here that this forms a focal point. The Examiner then states at page 3, lines 20-21, that the proposed combination of Miller, Yamada, and JP '551 is "in order for form a focal point at said discharge port or in the vicinity of said discharge port." However, no explanation is given as to why or how this combination will form a focal point.

Applicant respectfully reiterates the previous argument that there is no suggestion or motivation in the references for this limitation of the claims. JP '551 discloses a method for

producing an amorphous alloy-made member. In the device of JP '551, a vacuum pump is connected to vacuum suction port 16, and the inside of chamber 15 is evacuated (see paragraph [0010]). Then, current is sent through induction coil 13, and the hardener is 11 in syringe 12 is heated and made to dissolve. Gas is introduced from gas introduction port 12a, pressurizing the inside of syringe 12 and **injecting the dissolved hardener** from nozzle hole 12b, whereby it is **cast into mold 14** through sprue hole 22. (See [0043] and Figs. 2 and 3 of JP '551).

That is, the apparatus of JP '551 is an apparatus for **injecting a molten liquid from a nozzle into a mold**. There is **no atomization** in JP '551 and there is no disclosure that the molten liquid leaves the nozzle in the form of droplets of any shape. In fact, the liquid is injected through sprue hole 22 (see [0043] and Fig. 3). The inner wall of the syringe 12 is therefore not formed into a shape so as to "form a focal point at said discharge port or in the vicinity of said discharge port." There is no suggestion in JP '551 for this limitation. And since JP '551 discloses a nozzle for injecting molten liquid into a mold through a sprue hole, and not for atomizing the liquid into droplets, there can be no motivation for modifying the nozzle of JP '551 to be a completely different kind of nozzle that could not accomplish the task of injecting liquid into a mold.

Moreover, Applicant previously argued that, due to the structural differences between that apparatus of JP '551 and the atomization apparatus of Miller '975, the proposed combination of references would **not be functional** (argument in accordance with *In re Gordon*). The Examiner's response to this argument appears to be the statement that: "Miller, Yamada, JP 2001-293551 and Anderson are in the same technical field of nozzle with melting molten alloy material, therefore one [of] ordinary skill in the art would used [sic] these references to

combine." (Office action, page 4, lines 4-7). However, this vague statement does not address or rebut Applicant's argument under *In re Gordon*. Applicant therefore maintains the argument that the proposed combination of references would not be functional, and therefore, there can be no motivation for this proposed combination.

Accordingly, claims 4 and 7 not obvious over Miller et al. (US 5,289,975), Yamada (US 2003/0051851), JP 2001-293551 and Anderson et al. (US 5,423,520), taken separately or in combination.

If, for any reason, it is felt that this application is not now in condition for allowance, the Examiner is requested to contact the applicants' undersigned agent at the telephone number indicated below to arrange for an interview to expedite the disposition of this case.

In the event that this paper is not timely filed, the applicants respectfully petition for an appropriate extension of time. Please charge any fees for such an extension of time and any other fees which may be due with respect to this paper, to Deposit Account No. 01-2340.

Respectfully submitted,

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Enclosure: Petition for Extension of Time

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